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**CLAIMS** 

1. (currently amended) A presence notification method, in a system-comprising a

private branch exchange (PBX), a first PBX phone and a computer associated with the first

PBX phone, with the computer including a PBX Messaging Integration Client (PMIC)

eapable of placing and answering PBX calls without a PBX phone, routing incoming calls

directed to PBX extensions to other devices, forwarding calls away from PBX phones to

other devices, and placing calls on hold, with the PMIC associated with an individual, the

presence notification method comprising the steps of:

receiving at the a computer from the a private branch exchange (PBX) a first

message indicating an off-hook state of the a first PBX phone attached to the computer and

wherein the computer includes a PBX Messaging Integration Client (PMIC) capable of

placing and answering PBX calls without a PBX phone, routing incoming calls directed to

PBX extensions to other devices, forwarding calls away from PBX phones to other

devices, and placing calls on hold, with the PMIC associated with an individual;

consulting a subscriber table including an identity of one or more presence-state

subscribers; and

transmitting a second message to at least one of the one or more presence-state

subscribers indicating the off-hook state of the first PBX phone.

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2. (previously presented) The presence notification method of claim 1, wherein the computer is resident in an Internet Protocol (IP) network.

- 3. (original) The presence notification method of claim 1, wherein the second message is a presence-state message.
- 4. (original) The presence notification method of claim 3, wherein the presence-state message is a session initiation protocol (SIP) instant message.
- 5. (original) The presence notification method of claim 1, wherein first message is a computer telephony integration (CTI) event message.
- 6. (original) The presence notification method of claim 5, wherein the CTI event message is generated using a protocol selected from the group consisting of: Telephony Application Programming Interface (TAPI) protocol, Telephony Services Application Programming Interface (TSAPI) protocol, and the Computer Supported Telecommunications Applications (CSTA) protocol.
- 7. (original) The presence notification method of claim 5, wherein the CTI event message is received indirectly via a CTI server.

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8. (original) The presence notification method of claim 1, wherein second message is

an on-phone presence-state notification message.

9. (original) The presence notification method of claim 1, wherein the method further

comprises, prior to the receiving step, the step of transmitting to the PBX a registration

event message comprising a network address for the computer interface.

10. (original) The presence notification method of claim 1, wherein the method further

includes the steps of: receiving from the PBX a third message indicating an on-hook state

of the first PBX phone; and transmitting a fourth message to at least one of the one or more

presence-state subscribers indicating the on-hook state of the first PBX phone.

11. (currently amended) A media session method for a first computer operatively

coupled to a system comprising a private branch exchange (PBX) and a second computer,

wherein the first computer is associated with a first PBX phone and the second computer is

associated with a second PBX phone, with each of the first computer and the second

computer including a PBX messaging-integration client (PMIC) capable of placing and

answering PBX calls without a PBX phone, routing incoming calls directed to PBX

extensions to other devices, forwarding calls away from PBX phones to other devices, and

placing calls on hold, the concurrent media session method comprising the steps of:

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placing calls on hold.

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receiving a first message signifying that the a second PBX phone attached to the second computer is calling the a first PBX phone attached to the first computer;

transmitting a second message from the first computer to the second computer requesting a media session;

determining whether the media session request has been accepted; and

establishing a media session between the first computer and the second computer if the session request message has been accepted wherein each of the first computer and the second computer includes a PBX Messaging Integration Client (PMIC) capable of placing and answering PBX calls without a PBX phone, routing incoming calls directed to PBX extensions to other devices, forwarding calls away from PBX phones to other devices, and

- 12. (previously presented) The media session method of claim 11, wherein the first message comprises an extension number associated with a second PBX phone used by the first computer to generate the second message.
- 13. (original) The media session method of claim 12, wherein the second message comprises a universal resource identifier with an extension number of the second PBX phone.

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14. (original) The media session method of claim 11, wherein the media session is a concurrent media session conducted in parallel with telephonic communication between

the first PBX phone and the second PBX phone.

15. (original) The media session method of claim 11, wherein the media session is

selected from the group consisting of: an instant message session, a text chat session, a

multimedia session, a computer GUI interface sharing session, and a combination thereof.

16. (original) The media session method of claim 11, wherein the media session is a

SIP session.

17. (original) The media session method of claim 11, wherein the media session is a

text chat session.

18. (previously presented) The media session method of claim 17, wherein the users at

the first computer and second computer may manually escalate from the text chat session

to a second media session.

19. (original) The media session method of claim 11, wherein the first message is a

CTI event message.

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20. (original) The media session method of claim 11, wherein the step of determining

whether the media session request has been accepted comprises the step of receiving an

SIP OK message.

21. (currently amended) A call routing method for a system-comprising-a private

branch exchange (PBX), a first PBX phone and a computer associated with the first PBX

phone, the computer including a PBX Messaging Integration Client (PMIC) capable of

placing and answering PBX calls without a PBX phone, routing incoming calls directed to

PBX extensions to other devices, forwarding calls away from PBX phones to other

devices, and placing calls on hold with the PMIC associated with an individual, the call

routing method comprising the steps of:

receiving from the a private branch exchange (PBX) a first message indicating an

incoming call to the a first PBX phone attached to a computer wherein the computer

includes a PBX Messaging Integration Client (PMIC) capable of placing and answering

PBX calls without a PBX phone, routing incoming calls directed to PBX extensions to

other devices, forwarding calls away from PBX phones to other devices, and placing calls

on hold with the PMIC associated with an individual;

determining from a call routing table maintained by the first computer an incoming

call response to the incoming call; and

transmitting from the PMIC to the PBX a group of one or more messages based on

the incoming call response.

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22. (original) The call routing method of claim 21, wherein the group of messages

comprises a message answering the incoming call.

23. (original) The call routing method of claim 21, wherein the group of messages

comprises a message causing the PBX to discontinue a ring signal to the first PBX phone.

24. (original) The call routing method of claim 21, wherein the group of messages

comprises a message causing the PBX to transfer the incoming call to a second PBX

phone.

25. (previously presented) The call routing method of claim 21, wherein the group of

messages comprises a message causing the PBX to transfer the incoming call to the first

computer.

26. (previously presented) The call routing method of claim 25, wherein the method

further includes the step of establishing a voice-over-IP session between the PBX and the

first computer.

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27. (original) The call routing method of claim 21, wherein the group of messages

comprises a message causing the PBX to transfer the incoming call to a client.

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28. (original) The call routing method of claim 27, wherein the client is a SIP user

agent operatively coupled to the system.

29. (original) The call routing method of claim 21, wherein the group of messages

comprises a message causing the PBX to terminate the incoming call and transmit an

instant message.

30. (previously presented) The call routing method of claim 29, wherein the instant

message is directed to a second computer identified based upon a phone number associated

with the incoming call.

31. (original) The call routing method of claim 21, wherein the call routing table

comprises call processing rules structured as a function of the time and the day the

incoming call is received, the telephone number or extension associated with the incoming

call, and the presence-state of the user associated with the first PBX phone.

32. (currently amended) A call transfer method for a first computer operatively coupled

to a system comprising a private branch exchange (PBX) and a first PBX phone with the

first computer associated with the first PBX phone and with the first computer including a

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PBX Messaging Integration Client (PMIC) capable of placing and answering PBX calls

without a PBX phone, routing incoming calls directed to PBX extensions to other devices,

forwarding calls away from PBX phones to other devices, and placing calls on hold, with

the PMIC associated with an individual, the call transfer method comprising the steps of:

transmitting to the a private branch exchange (PBX) a first message for transferring

a telephone call associated with the a first PBX phone attached to the first computer

wherein the first computer includes a PBX Messaging Integration Client (PMIC) capable

of placing and answering PBX calls without a PBX phone, routing incoming calls directed

to PBX extensions to other devices, forwarding calls away from PBX phones to other

devices, and placing calls on hold, with the PMIC associated with an individual;

establishing a voice-over-IP session between the PBX and the first computer; and

replacing the telephone call to first PBX phone with a call to the first computer via

the voice-over-IP session.

33. (original) The call transfer method of claim 32, wherein the first message is a CTI

event message.

34. (previously presented) The call transfer method of claim 32, wherein the first

message comprises a universal resource identifier associated with the first computer.

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35. (original) The call transfer method of claim 32, wherein the step of establishing a

voice-over-IP session comprises the steps of:

receiving a voice-over-IP session request message from the PBX; and

transmitting a voice-over-IP session acceptance message.

36. (original) The call transfer method of claim 35, wherein the session request

message is an SIP INVITE message and the session acceptance message is an SIP OK

message.

37. (currently amended) A call transfer method for a first computer operatively coupled

to a system comprising a private branch exchange (PBX) and a first PBX phone, with the

first computer including a PBX Messaging Integration Client (PMIC) capable of placing

and answering PBX calls without a PBX phone, routing incoming calls directed to PBX

extensions to other devices, forwarding calls away from PBX phones to other devices, and

placing calls on-hold, with the PMIC associated with an individual, the call transfer

method comprising the steps of:

transmitting to the a private branch exchange (PBX) a first message for transferring

a voice-over-IP session associated with the first computer and the PBX; and

establishing a telephone call associated with the a first PBX phone attached to the

first computer; and

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which includes a PBX Messaging Integration Client (PMIC) capable of placing and answering PBX calls without a PBX phone, routing incoming calls directed to PBX

extensions to other devices, forwarding calls away from PBX phones to other devices, and

placing calls on hold, with the PMIC associated with an individual.

38. (original) The call transfer method of claim 37, wherein the first message is a CTI

event message.

39. (original) The call transfer method of claim 37, wherein the first message

comprises an extension number associated with the first PBX phone.

40. (original) The call transfer method of claim 37, wherein the step of establishing the

voice-over-IP session comprises the step of transmitting a private digital signals and voice

(PDSV) signal to the first PBX phone.

41. (currently amended) A private branch exchange (PBX) call control method for a

first computer operatively coupled to a system comprising a PBX and a first PBX phone;

with the first computer including a PBX Messaging Integration Client (PMIC) capable of

placing and answering PBX calls without a PBX phone, routing incoming calls directed to

PBX extensions to other devices, forwarding calls away from PBX phones to other

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devices, and placing calls on hold, with the PMIC associated with an individual, the PBX

call control method comprising the steps of:

receiving from the a private branch exchange (PBX) a first message indicating the

presence of a telephone call associated with the a first PBX phone attached to the first

computer wherein the first computer includes a PBX Messaging Integration Client (PMIC)

capable of placing and answering PBX calls without a PBX phone, routing incoming calls

directed to PBX extensions to other devices, forwarding calls away from PBX phones to

other devices, and placing calls on hold, with the PMIC associated with an individual; and

transmitting with the PMIC to the PBX a call control message.

42. (original) The PBX call control method of claim 41, wherein the first message is a

CTI event message.

43. (original) The PBX call control method of claim 41, wherein the first message is a

call hold command instructing the PBX to place the telephone call associated with the first

PBX phone on hold.

44. (original) The PBX call control method of claim 41, wherein the first message is a

call forward command instructing the PBX to transfer the telephone call associated with

the first PBX phone to second phone.

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45. (original) The PBX call control method of claim 44, wherein the second phone is a second PBX phone.

46. (original) The PBX call control method of claim 44, wherein the second phone is a

voice-over-IP client.

47. (original) The PBX call control method of claim 46, further comprising the steps

of:

transmitting to the PBX a first message for forwarding the telephone call associated

with the first PBX phone to a voice-over-IP client;

establishing a voice-over-IP session between the PBX and the voice-over-IP client;

and

directing the telephone call to first PBX phone to the first computer interface via

the voice-over-IP session.

48. (original) The PBX call control method of claim 41, wherein the call control

message is an answer call command instructing the PBX to answer the telephone call using

a second device.

49. (original) The PBX call control method of claim 48, wherein the second device is a

second PBX phone.

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50. (currently amended) A private branch exchange (PBX) call control method for a

first computer operatively coupled to a system comprising a PBX and a first PBX phone,

with the first computer including a PBX Messaging Integration Client (PMIC) capable of

placing and answering PBX calls without a PBX phone, routing incoming calls directed to

PBX extensions to other devices, forwarding calls away from PBX phones to other

devices, and placing calls on hold, with the PMIC associated with an individual, the PBX

call control method comprising the steps of:

transmitting to the a private branch exchange (PBX) a group of one or more

messages comprising:

a command to the PBX to make a call to a first PBX phone connected to the

first computer wherein the first computer includes a PBX Messaging Integration Client

(PMIC) capable of placing and answering PBX calls without a PBX phone, routing

incoming calls directed to PBX extensions to other devices, forwarding calls away from

PBX phones to other devices, and placing calls on hold, with the PMIC associated with an

individual, and

a telephone number of the first PBX phone; and

receiving a first message indicating the hook state of the first PBX phone.

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